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WORLD EPIDEMIOLOGY REVIEW

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CONTENTS

PAGE

HUMAN DISEASES

AUSTRALIA

Possibility of Encephalitis Outbreak Discussed (Various sources, 5, 7, 12 Sep 78)	1
Warning Signs, by Philip McIntosh, Simon Nasht	
Mosquito Research	
Tourists Assured	

Briefs

Malaria Rise	3
--------------	---

BANGLADESH

Briefs

Cholera Outbreak	4
Cholera in Madaripur	4
Cholera in Sylhet	4

INDIA

Encephalitis Spreads to Assam (THE STATESMAN, 2 Sep 78)	5
--	---

Thirty Million Suffering From Filaria (THE STATESMAN, 4 Sep 78)	6
--	---

Briefs

Cholera Outbreak in Allahabad	7
Lack of Insecticides	7
'Encephalitis Raging'	7

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CONTENTS (Continued)	Page
INDONESIA	
Briefs	
West Java Cholera	8
Cholera Deaths	8
Malaria Outbreak in Buton Island	8
JAPAN	
Briefs	
New Cholera Cases	9
KENYA	
Suspected Meningitis Outbreak Kills Seven (DAILY NATION, 14 Sep 78)	10
LAOS	
Briefs	
Vientiane Public Health Work	11
Atsaphangthong Hospital Achievements	11
Meuang Kasi Malaria Suppression	12
MALAYSIA	
Dengue Rate Increases in Peninsular States (NEW STRAITS TIMES, 28 Jul 78)	13
Briefs	
Cholera Cases	14
MOZAMBIQUE	
Briefs	
Vaccination Campaign Continuing	15
NEW ZEALAND	
Health Department Warns All To Get Polio Shots (THE EVENING POST, 22 Aug 78)	16
Russian Flu Sweeps Through Army (THE EVENING POST, 22 Aug 78)	17
SINGAPORE	
Briefs	
Cholera Cases Confirmed	18

CONTENTS (Continued)	Page
SPAIN	
Briefs	
Meningitis Cases Reported	19
SUDAN	
Briefs	
Diphtheria Discovered in Khartoum	20
SYRIA	
Measures Taken To Prevent Recurrence of Cholera (TISHRIN, 13 Jul 78)	21
URUGUAY	
Hydatidosis Campaign Continues, Citizenry Praised (LA MANANA, 4, 16 Aug 78)	24
Sixth Dosage Period, by Heber Escondeur Muniz Commission Acknowledges Efforts, by Daniel Rondan	
Nation Gets New, Remodeled Health Clinics, Hospitals (Various sources, various dates)	26
Medical Services Opened Durazno Center Authorized New Blanquillo Polyclinic Intensive Care Center Remodeled Hospital Gets Director	
YUGOSLAVIA	
Rising Rabies Cases Necessitate New, Stricter Measures (R. Pavlovic; VETERINARSKI GLASNIK, No 6, 1978)	32
ZAIRE	
Cholera Epidemic Reported (Jean-Claude Vantroyen; LE SOIR, 9 Sep 78)	42
ANIMAL DISEASES	
AUSTRALIA	
Appearance of Fish Parasite Causes Concern (Colin Allison; THE SYDNEY MORNING HERALD, 5 Sep 78) ..	45

CONTENTS (Continued)		Page
BRAZIL		
Briefs		
African Swine Fever		46
Swine Fever in Porto Alegre		46
Movement of Hogs		46
CAMEROON		
Briefs		
Vaccinations for Anthrax		47
EGYPT		
Briefs		
Rift Valley Fever		48
LAOS		
Briefs		
Foot-and-Mouth Disease		49
Vientiane Veterinary Work		49
Paksan Veterinary Work		49
Hatsaifong Veterinary Work		50
Saithani Veterinary Work		50
NEW ZEALAND		
Scrapie Prone Sheep 'A Risk That Failed' (THE PRESS, 19 Aug 78)		51
Briefs		
Cattle Kill Continues		52
URUGUAY		
Briefs		
Swine Fever Measures		53
ZAMBIA		
Briefs		
Rabies Infested Areas		54

CONTENTS (Continued)

Page

PLANT DISEASES AND INSECT PESTS

AUSTRALIA

Briefs

Rare Wheat Disease 55

BURMA

Leaf Beetles Attack Young Paddy Plants
(THE WORKING PEOPLE'S DAILY, 8 Sep 78) 56

Briefs

Locust Threat 57

IRAN

Locust Swarms Predicted in October
(TEHRAN JOURNAL, 10 Aug 78) 58

KENYA

Explosives Used To Destroy Wheat Eating Birds
(DAILY NATION, 11 Sep 78) 59

MOZAMBIQUE

Prodenia Pest Endangering Cotton Production in Nampula
(Faria Lobo Interview; NOTICIAS, 20 Sep 78) 60

NEW ZEALAND

Briefs

Tomato Wilt 61

RHODESIA

Experiment To Sterilize Tsetse Flies Reported
(THE RHODESIAN FINANCIAL GAZETTE, 8 Sep 78) 62

VIETNAM

Briefs

Insects, Disease Affect Crops 64

AUSTRALIA

POSSIBILITY OF ENCEPHALITIS OUTBREAK DISCUSSED

Warning Signs

Melbourne THE AGE in English 7 Sep 78 p 3

[Article by Philip McIntosh and Simon Nasht]

[Text]

The assistant State Minister for Health, Mr. Jona, has warned that an epidemic of killer encephalitis could break out along the Murray Valley this summer.

Mr. Jona revealed in a confidential letter released yesterday that two signs of an impending epidemic already were evident.

They were increased mosquito breeding promoted by wet weather and an early pairing of birds indicating a likely increase in bird populations.

An outbreak of Australian Arbo encephalitis (formerly Murray Valley encephalitis) in 1974 claimed 11 lives in four months.

Six were Victorians and five came from southern New South Wales and South Australia.

Health Department records showed that 29 Victorians were infected with the virus and 23 survived the "sleepy sickness".

One theory for the disease is that the virus is brought to the Murray Valley by birds from northern Australia forced south by heavy rains.

Mosquitoes, thought to be of the *culex annulirostris* species, take the virus from the birds and inject it into the human blood-stream.

Mr. Jona's letter was written to the Minister for State Development, Mr. Crozier, when Mr. Jona was acting Health Minister last month.

Mr. Jona wrote that there already have been eight cases of encephalitis reported from the north of Western Australia.

He said that because of the early warning signs the Commission of Public Health believed the coming summer "has great potential for developing into an epidemic year for Australian encephalitis."

The Minister said Health Department officers were watching the situation but the control of mosquito breeding was the responsibility of local councils.

The councils are trained and advised by the Health Commission and have legislative backing from the Health (mosquito control) Regulations.

But it is believed only the Mildura shire has invoked its powers under these regulations.

Mr. Jona said a spraying campaign could be justified on health grounds only if there were local cases of Australian encephalitis, or the imminent danger of them.

He said "the commission has plans to act in such an emergency."

Mr. Jona was replying to questions Mr. Crozier had put on behalf of the Goulburn Regional Tourist Authority which was alarmed at a mosquito infestation along the Murray River.

He suggested to the authority that as a possible spraying campaign was not yet justified, they ensure that councils in the region apply remaining mosquito control regulations "with all the force at their command".

Mosquito Research

Perth THE WEST AUSTRALIAN in English 5 Sep 78 p 29

[Text]

Extensive research studies are being done on the ring-nosed mosquito in the North-West to try to determine the percentage of the mosquitoes carrying the virus responsible for the recent outbreak of encephalitis. Dr Holman is chairman of the working party established to study the encephalitis outbreak in the North-West. He said the studies were tedious and time-consuming. Thousands of mosquitoes had to be caught and crushed, the virus extracted and then grown in culture. The research was a continuing programme and a further survey of the mosquitoes would be undertaken later this year.

Tourists Assured

Perth THE WEST AUSTRALIAN in English 12 Aug 78 p 4

[Text]

There was no need to curtail tourism in Kununurra during the recent outbreak of encephalitis, a special committee has reported.

The Minister for Health, Mr Ridge, said yesterday that the committee saw no cause for concern because many bites by infected mosquitoes would be required to produce an infection.

The risk to Kununurra residents of contracting encephalitis was minimal.

People who had been bitten occasionally by virus-bearing mosquitoes would, over a period, have built anti-bodies and developed an immunity.

ANTI-BODIES

This would already have happened to most people in Kununurra and throughout the Kimberleys.

Even for people without this immunity, such as tourists, there was no cause for concern.

Mr Ridge said that people should take normal precautions against being bitten excessively by insects.

Those who did this would be unlikely to contract the disease.

CSO: 5400

AUSTRALIA

BRIEFS

MALARIA RISE--Honiara, (AAP)--The number of Malaria cases in the Solomon Islands has increased in recent weeks, with more than 1,800 cases reported. [Text] [Brisbane THE COURIER-MAIL in English 8 Sep 78 p 16]

CSO: 5400

BANGLADESH

BRIEFS

CHOLERA OUTBREAK--Dacca was officially declared a cholera-free area Wednesday, but reports of cholera deaths in five outlying districts have been pouring in in recent weeks. The cholera, which had spread in epidemic form in some districts, had so far claimed about 55 lives, newspapers reported quoting official sources. The latest report came yesterday from the northeastern district of Sylhet, where 33 people died in a week. But a local surgeon told the official news agency BSS [Bangladesh Sangbad Sangstha] that the situation in Sylhet was now under control. Ten people died in Comilla, east of Dacca, where cholera broke out for the second time in 6 weeks. Other districts affected are Faridpur, Noakhali and Jessore. [Text] [Hong Kong AFP in English 1220 GMT 14 Sep 78]

CHOLERA IN MADARIPUR--Cholera has claimed seven lives in two villages of Rajoir police station of Madaripur subdivision within a period of 3 days ending on September 9. The situation is now under control. A mass vaccination campaign is yet to start in the locality but some staff has been deputed to work in the affected areas. [Text] [Dacca THE BANGLADESH OBSERVER in English 13 Sep 78 p 1]

CHOLERA IN SYLHET--Thirty-three persons died of cholera in Sylhet district last week. So far 70 cholera cases have come to the notice of the health authorities. The authorities say that the majority of those who died were children. The civil surgeon also says that massive preventive measures are being taken in the affected areas and added that the situation is now under control. Lack of pure drinking water in the affected areas is acute. Either there is no tubewell or the existing tubewells have gone out of order in the affected areas. [Text] [Dacca THE BANGLADESH OBSERVER in English 14 Sep 78 p 1]

CSO: 5400

ENCEPHALITIS SPREADS TO ASSAM

Calcutta THE STATESMAN in English 2 Sep 78 p 3

[Text]

ENCEPHALITIS has spread to Assam. This is the first time that this deadly disease has been detected in the north-eastern part of the country. Till now it had been localized in the Burdwan, Bankura and Birbhum districts of West Bengal and in the Dhanbad area of Bihar.

On Friday, the principal of the Dibrugarh Medical College spoke over the telephone to Dr A. B. Chowdhury, director of Calcutta's School of Tropical Medicine, saying that there had been a "large-scale outbreak" of the disease and asking for help. A team of medical experts from the School of Tropical Medicine will leave for Assam on Saturday.

Dr Chowdhury, who is also the vice-president of the World Federation of Parasitologists, received a telex message from the Indian Council of Medical Research in Delhi during the day. The council reported that a few people had died of the disease which appeared to have broken out in upper Assam.

Dr Chowdhury said on Friday that vaccines were not very effective once the disease had broken out on a large scale. Moreover, there was no specific medicine which could cure encephalitis. The doctors could only take "palliative measures and hope for the best".

However, the outbreak could be brought under control if steps were taken to destroy the breeding grounds of mosquitoes. Culex mosquitoes are the main transmitting agents of the disease.

Since encephalitis affects the brain, research workers at the School of Tropical Medicine has urged the Health Department to help them secure "brain material" from the victims of the disease. Adequate "brain material" has not yet been made available although the disease had broken out in Burdwan and Bankura nearly two months ago.

Our Staff Correspondent in Durgapur adds: The disease has claimed 283 lives in Bankura, Birbhum and Burdwan. The Durgapur steel plant authorities have asked people living in the steel city to take precautions, including use of mosquito-nets. Encephalitis cases have been reported in the plant hospital.

The authorities are worried over the presence of the Culex mosquitoes. They usually get the infection from pigs, wild birds, domestic fowl and cowdung. Infection from these viruses rarely spreads from man to man. Some chemicals are also said to be carriers of encephalitis viruses.

CSO: 5400

INDIA

THIRTY MILLION SUFFERING FROM FILARIA

Calcutta THE STATESMAN in English 4 Sep 78 p 9

[Text]

COCHIN, Sept. 3.—More than 200,000 people in the country are estimated to have been affected by "Malayi" filaria (elephantiasis), reports PTI. According to a survey, 30 million people suffer from filaria and of then 14 million actually have swollen hands or legs or suffer from hydrocele.

"Bancrofti", a common type of filaria, is found all over the country except in Jammu and Kashmir, Rajasthan and some other northern districts. In Kerala it is prevalent mostly in Sherttalai taluk and its neighbourhood in Alleppey district, where more than two million people are exposed to the possibility of transmission.

According to an official estimate, 236 million people in Gujarat, Maharashtra, Karnataka, Andhra Pradesh, Kerala, Tamil Nadu, Orissa, Madhya Pradesh, Bihar, Uttar Pradesh, Assam and the Andaman and Nicobar Islands are exposed to "Bancrofti".

A research cell of the New Delhi based National Institute of Communicable Diseases has been functioning in Sherttalai for several months in an effort to control the disease. The studies being conducted by a team of experts are to conclude next year.

For the purpose of the studies, five methods are being adopted: spraying with BHC; spraying-cum-treatment of people found harbouring germs; mass treatment

programme; detection of germ-carriers through blood tests and disinfection of ponds and other stagnant water sources to prevent breeding of mosquitoes.

The second method, was found to be the best for controlling the disease.

Mr C. K. Rao, Deputy Director of the National Institute of Communicable Diseases, who has just returned to New Delhi after evaluating the progress at Sherttalai, told reporters in Cochin that the institute's main objective was to train people on the "dos", and "don'ts" on how to avoid being carriers of the disease.

There are three branch units functioning at Calicut (Kerala), Rajahmundry (Andhra) and Varanasi (U.P.). Dr Rao said that in Kerala alone, 15 units under the State Government and with Central assistance, were working. But the programme was yet to reach villages.

Mr Rao felt that effective drainage facilities alone could end water stagnation, a sure breeding ground for mosquitoes.

CSO: 5400

INDIA

BRIEFS

CHOLERA OUTBREAK IN ALLAHABAD--Cholera has broken out among flood victims in the Hindu pilgrim city of Allahabad (population 1 million) which narrowly escaped complete destruction by the swollen waters of the Ganges and the Jamuna early this week, according to reports reaching here today. The reports said about 24 cases were detected in the Basai village. Uttar Pradesh minister for forests Lakshmi Sahai Saxena, who visited the area, said the victims had been shifted to another nearby town for medical aid. The reports also quoted a legislator of the state as saying that a large number of suspected cases of cholera had been reported from the western suburbs of Allahabad.
[Text] [Hong Kong AFP in English 0819 GMT 13 Sep 78 BK]

LACK OF INSECTICIDES--Durgapur, Sept 6--Lack of insecticides is hampering the disinfecting programme of the State Government to check the spread of encephalitis in Bankura, Birbhum and Burdwan. The West Bengal Government has approached other States for insecticides. More than 300 people have died of this disease in the three districts. [Text] [Calcutta THE STATESMAN in English 7 Sep 78 p 7]

'ENCEPHALITIS RAGING'--The chairman of Bankura Municipality said in a statement received in Calcutta on Friday that encephalitis had been raging in the town for over a month. Most of the people affected were dying because there was no indication of the source of the disease nor were there adequate medical facilities. He alleged that the situation had been allowed to deteriorate. He said he had written to the Health Minister asking for vaccines or other medicines and had also informed the Government of the necessity of using anti-malaria oil to eliminate mosquitoes. [Text] [Calcutta THE STATESMAN in English 26 Aug 78 p 9]

CSO: 5400

INDONESIA

BRIEFS

WEST JAVA CHOLERA--Jakarta, 8 Sep--The cholera outbreak which is hitting two districts in West Java has claimed seven lives and sent hundreds [of] others to the hospitals for treatment, it was reported today. The disease hit the Ciamis and Sukabumi districts at the beginning of last month and is believed to have been spread by the continuous rain during the past few weeks. [Text] [Hong Kong AFP in English 1405 GMT 8 Sep 78 BK]

CHOLERA DEATHS--Jakarta, 7 Sep--More than 170 people in the Sukabumi district, about 100 km south of here, were rushed to hospitals last month in a sudden outbreak of cholera which to date has killed 3 persons. The large circulation daily KOMPAS said the three had died because their families did not inform the health authorities in time. Sixty-nine other people fell victim to the contagious disease earlier this week in the same district. The West Java health authorities have rushed a big supply of serum and antibiotics to the area. [Text] [Hong Kong AFP in English 0640 GMT 7 Sep 78 BK]

MALARIA OUTBREAK IN BUTON ISLAND--Jakarta--An outbreak of Malaria which hit the Talaga village in Buton Island, southeast Celebes, has claimed the lives of 84 people, it was reported today. The large circulation Daily Kompas said the first malaria victim died in January but the case was not reported to the authorities until July when a total of 29 people died of the disease in a single month. Kompas said by July the number of people killed by the disease reached 84, while health authorities were last reported to be launching a fumigation drive to free the area of malaria mosquitos. [Text] [Hong Kong AFP in English 9428 GMT 13 Sep 78]

CSO: 5400

JAPAN

BRIEFS

NEW CHOLERA CASES--Tokyo 25 Sep KYODO--A 71-year-old man in Kameyama, Mie prefecture, and a 55-year-old woman in Fukui were confirmed Sunday as genuine cholera cases. This brought the number of cholera cases reported in Japan so far this year to 18. The Health and Welfare Ministry said that none of the two new cholera patients or their family members had made overseas trips and they did not have contacts with travelers returning from abroad. Therefore, it said it is still not known how they contracted the disease. The ministry said the two were suffering from cholera of the El Tor type. The man in Kameyama had been complaining of diarrhea and fever since September 16 when he was hospitalized. He was isolated at another hospital Saturday night. The woman in Fukui was hospitalized September 18 after suffering from diarrhea. She was isolated in the Fukui Red Cross Hospital. [Text] [Tokyo KYODO in English 0001 GMT 25 Sep 78 OW]

CSO: 5400

KENYA

SUSPECTED MENINGITIS OUTBREAK KILLS SEVEN

Nairobi DAILY NATION in English 14 Sep 78 p 4

Text

ABOUT seven people have died in several parts of Busia District following what is suspected to be an outbreak of Meningitis.

Busia District Hospital has assured wananchi that the situation will be brought under control soon. Victims who died within a few hours after the outbreak were from Bulanda and Matayos sub-locations.

Meningitis is a communicable disease. Victims suffer from stiff necks and pains in the spinal cord. After about two to three days, a patient begins to vomit and diarrhoea before dying.

A 50-year-old man reportedly died last Monday. Within three hours, a school girl in a nearby village also died. Yesterday, another man at the home of the first victim was reported to have died.

Reports from Matayos said yesterday three men and a woman had also died from the same disease. Other people were reported to have been admitted to hospital.

Meanwhile, Busia District Hospital was yesterday congested with out-patients complaining of headaches. A hospital official said they were suspected to have been affected by the disease.

CSO: 5400

LAOS

BRIEFS

VIENTIANE PUBLIC HEALTH WORK--In order to insure that the people would have strong health to successfully increase production, between late May and early July 1978 the Vientiane administration and Public Health Office sent a 20-man mobile team supplied with 15 tons of DDT to work with district and canton medical cadre in ten districts in Vientiane Province, Meuang [district] Kasi, Meuang Sanakham, Meuang Vang Vieng, Meuang Phon Hong, Meuang Keo Udom, Meuang Thoulakhom, Meuang Nasaithong, Meuang Saithani, Meuang Paksan, and Meuang Hom. In working to spread DDT to suppress mosquitoes, the medical unit faced several difficulties, such as moving from district towns to rural areas. Some districts have no roads. They climbed mountains and traveled down streams for two or three days in order to reach hilltribes. However, with determination and concern for the health of the people, the fraternal revolutionary medical workers reached their destinations and were able to complete their duties despite the extreme difficulties they faced. In addition to spreading DDT, they explained the three cleans principles to the people of whatever village they reached. These principles are a good way for the people to rid themselves of mosquito-caused diseases. The medical unit has completed spreading DDT in seven districts and is determinedly continuing its work in Meuang Paksan, Meuang Keo Udom, and Meuang Sanakham. Completion is expected by the end of July. [Vientiane VIENTIANE MAI in Lao 11 Jul 78 p 1]

ATSAPHANGTHONG HOSPITAL ACHIEVEMENTS--Implementing the slogan, "turn all tasks to serve production," medical cadre from the Meuang [district] Atsaphangthong hospital, Savannakhet went out on three occasions during the first 6 months of 1978 to give smallpox and cholera inoculations and treat the sick in various villages in the district. On each occasion the medical units worked tirelessly and lectured to the people, especially those in isolated rural areas. During this period they examined, gave medicine to, and innoculated against smallpox and cholera a total of over 54,300 people and explained methods of disease prevention to them. [Vientiane KHAOSAN PATHET LAO in Lao 3 Jul 78 p A 3]

MEUANG KASI MALARIA SUPPRESSION--In order to eradicate mosquito-caused malaria, fraternal medical cadre of the Meuang [district] Kasi, Vientiane hospital engaged in a gloriously successful malaria campaign in five cantons in the district between 2 April - 25 May 1978. They spread DDT to suppress mosquitoes and explained the three cleans principles to people throughout the area. [Vientiane VIENTIANE MAI in Lao 1 Jul 78 p 1]

CSO: 5400

MALAYSIA

DENGUE RATE INCREASES IN PENINSULAR STATES

Kuala Lumpur NEW STRAITS TIMES in English 28 Jul 78 p 28

[Text]

KUALA LUMPUR,
Thurs. — The number
of dengue fever cases
is on the increase in
Peninsular Malaysia,
especially in Perak,
Negri Sembilan and
Malacca.

A Health Ministry
spokesman said these
three states were hit
more badly than during
the same period last
year.

There are 31 cases of
dengue haemorrhagic fe-
ver with four deaths to
date in Perak compared
with 18 cases and three
deaths last year.

In Negri Sembilan, 50
cases of dengue haemor-
rhagic fever were repor-
ted with two deaths this
year while only five ca-
ses and one death were
reported for the same pe-
riod last year.

The number of dengue
fever was 11 this year
while only two cases
were recorded last year.

No cases of dengue
haemorrhagic fever
were reported in Malac-
ca last year although 10
cases have been recor-
ded so far this year.

Last year, one case of
dengue fever was repor-
ted while 12 cases came
to light this year.

CSO: 5400

MALAYSIA

BRIEFS

CHOLERA CASES--Fifteen new cases of cholera, 12 suspected and 3 carriers, were reported in Pahang in the past 24 hours. The new cases were one suspected case and two carriers in Kuantan, five suspected cases and one carrier in Pekan, five suspected cases in Lipis and one suspected case in Jerantut. [Text] [Kuala Lumpur Domestic Service in English 1130 GMT 1 Sep 78]

CSO:5400

MOZAMBIQUE

BRIEFS

VACCINATION CAMPAIGN CONTINUING--The National Vaccination Campaign is continuing its operations in Gaza. A total of 562,097 persons have already been vaccinated in the Manjacaze, Chibuto, Limpopo, Guija and Massingir districts. The team operating in the Bilene District has already vaccinated 34,204 persons and has been able to count on an excellent degree of cooperation by the people. [Text] [Maputo NOTICIAS in Portuguese 4 Sep 78 p 3]

CSO: 5400

HEALTH DEPARTMENT WARNS ALL TO GET POLIO SHOTS

Wellington THE EVENING POST in English 22 Aug 78 p 1

[Text]

The Health Department has warned that everybody should make sure they are immunised against poliomyelitis.

The warning was issued today by the department's deputy Director of Public Health (Dr R Campbell Begg).

In a statement he said that in recent months almost 100 cases of the crippling disease had been reported in the Netherlands and more were now being reported in Canada.

He said these cases should bring home to New Zealanders the danger of not being immunised.

He said the viral disease affected people in all age groups and most victims suffered varying degrees of paralysis.

Those affected had rejected immunisation for personal beliefs.

Dr Begg, who is responsible for disease control in New Zealand, warned that the Dutch experience showed that

even where immunisation levels were reasonably high, the virus which caused polio could still be present in the community.

Although epidemics were unlikely, outbreaks in unprotected groups could occur, he said.

Most New Zealanders had been immunised in a massive campaign in the early 1960s but there could still be a few people, particularly among those who had immigrated since then, who were at risk.

Protection for adults required two oral doses of vaccine. It was recommended that children should receive doses at three, five and 18 months.

Dr Begg said parents should make sure that their children were given the advantage of this necessary and effective

Polio vaccinations are free for children up to the age of 16.

CSO: 5400

NEW ZEALAND

RUSSIAN FLU SWEEPS THROUGH ARMY

Wellington THE EVENING POST in English 22 Aug 78 p 1

[Text]

The sickness which swept through Waiouru and forced the cancellation of an Army exercise earlier this month has now been positively identified as Russian flu.

The Health Department's deputy Director of Public Health (Dr R Campbell Bogg) said today the identification had been confirmed by the National Health Institute.

He said the flu — officially coded A-USSR-90-70 — had been isolated from swabs taken from soldiers at Waiouru.

Tests were now being made to see whether it had spread to Army camps in other parts of New Zealand.

Dr Bogg said that as the strain spread he expected schools and universities to have high absenteeism rates.

This was because people under about 20 years of age were less likely to have any immunity to the strain.

People over this age were likely to have antibodies in their systems from the last time a similar strain was prevalent — from 1947 to 1957.

He said Russian flu was a fairly mild strain. It came on quickly and lasted about three days, causing a general malaise, aches and pains and it was often accompanied by dry coughing.

Another strain — Texas flu — was also expected to be circulating in New Zealand this winter, said Dr Bogg.

One case of this was identified earlier this year by the National Health Laboratories. He said it too was a fairly mild flu strain.

CSO: 5400

SINGAPORE

BRIEFS

CHOLERA CASES CONFIRMED--Singapore, 2 Sep (AFP)--The Singapore Government said today that three new cholera cases and one carrier have been confirmed. All the victims, their ages ranging from 23 to 74, are under treatment and are now recovering, the statement added. [Text] [Hong Kong AFP in English 1000 GMT 2 Sep 78 BK]

CSO: 5400

SPAIN

BRIEFS

MENINGITIS CASES REPORTED--According to the Epidemiological Bulletin of the Undersecretariat of Health a high incidence of meninigitis cases has continued during the last few months. The expected normal seasonal drop did not take place. The number of cases recorded up to 2 July, according to the bulletin, is 2,561, while last year by the same date there were 1,448 cases. The epidemiological index is 1.76 which indicates an epidemic situation of high incidence. The provinces with the highest rates are Guipuzcoa, Lugo, Orense and the Coruna. [Text] [Madrid EL PAIS in Spanish 18 Aug 78 p 13] 9204

CSO: 5400

SUDAN

BRIEFS

DIPHTHERIA DISCOVERED IN KHARTOUM--Khartoum, 10 September--Some 16 cases of diphtheria have been discovered in different areas here. The health authorities have formed teams for vaccinating children in Khartoum province against the disease. By yesterday 364 children had been vaccinated. [Text] [Khartoum SUNA in English 0830 GMT 10 Sep 78 JN]

CSO: 5400

SYRIA

MEASURES TAKEN TO PREVENT RECURRENCE OF CHOLERA

Damascus TISHRIN in Arabic 13 Jul 78 p 2

[Article: "Concentrated Effort To Prevent Recurrence of Cholera"]

[Text] The country is free of cholera, and no new cases have been reported. Health officials, however, are not certain that the epidemic will not recur, particularly toward the beginning of next month or the end of this month. The announcement of new cases in some of the neighboring countries is responsible for the uncertainty. They are, therefore, calling for intensified efforts to prevent a recurrence and for speedy control should the disease appear again. Measures being taken by the Health Ministry and by other officials include:

1. Last year's cases, including carriers who were not stricken by the disease, will be followed up. Health laboratories are examining stool samples of past cholera cases as well as of carriers for traces of the cholera microbe.
2. Drinking water samples from all regions in which the disease appeared the previous year will be examined to insure noncontaminated water supplies.
3. Stool samples of children with diarrhea symptoms will be examined in clinics and hospital outpatient departments for evidence of the disease.
5. Water samples from swimming pools, public baths and beaches will be examined.
6. Food industry workers will be examined on a periodic basis. Uncooked food samples will also be monitored.
7. A concentrated campaign to inform the public of the value of cleanliness will be launched with the assistance of the news media and other public institutions and clubs. The campaign will emphasize the importance of cleanliness as a preventive measure and will inform the public of the dangers of consuming contaminated foods and beverages, particularly uncooked foods and unboiled water.

Sanitation workers in Damascus are working at full capacity. By the beginning of the second week of the cleanliness campaign they had managed to rid the city of all waste accumulations with the exception of the waste disposal center at al-Dahadil, which will be soon relocated. Assurance to this effect came in a telephone conversation between TISHRIN and Mr Mahmud Hammu, director of the Sanitation Department.

In addition, the Damascus governorate is embarked on a program to wash all streets of Damascus.

Despite all the above-mentioned efforts, certain weak points in the campaign remain and are in need of immediate attention. Among these, observed during an inspection tour, are the following:

1. In an unofficial visit to the Karantina Hospital for contagious diseases it became evident that the hospital's location is no longer suitable. Housing developments in the vicinity of the Qabun intersection have sprung up around the hospital. A tour of the interior of the hospital revealed several deficiencies, including a significant shortage of personnel and equipment. By way of example, it is noted that: There is no emergency generator to light the hospital and operate its equipment in the event of a power failure. There is no artesian well to supply the hospital with water in the event of a water supply stoppage, as has occurred frequently in the past. There is an evident shortage of equipment for sterilization. There is no central heating system, and the heating system in use is antiquated and in disrepair. The telephone system is out of order most of the time. There is no adequate security or walls to prevent the mixing of patients and visitors, the intrusions of outsiders or the escape of patients. There is no doctor on duty to receive patients, and the task is handled by a medical student who is currently preparing for exams. It takes several days for laboratory results to be received by the hospital. The hospital's cashier is on vacation, and his duties are being handled by a nurse.

In short, the hospital resembles a deserted facility. A single nurse is in charge of approximately 50 patients. A few of these are noncholera patients and include some with heart problems and other maladies. Two suffer from diarrhea not related to cholera.

Public and professional organizations are not adequately discharging their duties to educate the public.

Inspection of business establishments engaged in merchandising food items is less than vigorous. In particular, this is true of small neighborhood shops which dispense cold beverages and ice cream made in nonsterilized machines.

The level of cooperation between the public and sanitation workers is less than adequate in view of the enormous potential danger to public health. This is especially the case in the densely populated parts of the city.

Several residential areas are in violation of health ordinances and are in need of sewers to eliminate the danger of open ditches.

The system of selling plastic [garbage] bags to the public needs to be reconsidered. It seems advantageous to emulate the example of neighboring Jordan, where garbage bags are dispensed free of charge to the public. Sanitation workers there dispense the free bags as they collect filled ones. The necessity to reconsider our system is all the more important in view of the fact that the sale of plastic bags at 13 piasters each has become a burden to low-income families.

9063
CSO: 5400

URUGUAY

HYDATIDOSIS CAMPAIGN CONTINUES, CITIZENRY PRAISED

Sixth Dosage Period

Montevideo LA MANANA in Spanish 16 Aug 78 p 12

/Article by Heber Escondeur Muniz/

/Text/ Trinidad--The Pilot Program to Combat Hydatidosis is carrying out the sixth period of dosage with Droncit in our department.

Until Friday, the 18th, 14 centers will be installed at the main office of the Flores Pilot Program and the Police Sections of the department. As previously indicated, anyone failing to comply with this obligation will be liable to a fine of 50 pesos.

As regards dog registrations, they expire on 31 August and cost 15 pesos. All holders of welfare cards are entitled to free registrations.

In relation to expired cards, as previously announced, those which ran out on 31 July can be renewed until 20 August.

Commission Acknowledges Efforts

Montevideo LA MANANA in Spanish 4 Aug 78 p 14

/Article by Daniel Rondan/

/Text/ Mercedes--On the anniversary of the first year of operation of the Honorary Departmental Commission to Combat Hydatidosis, under the chairmanship of Col Milton Rotulo and the secretaryship of Dr Enrique Prado, the organization in question has publicly expressed its appreciation to the people and to all the institutions which in one way or another have helped it to carry out its assigned task, especially the press, which has spared no efforts to spread the word and to counsel the group in such an altruistic campaign. The commission also pointed out to LA MANANA that, encouraged by the success attained to date, the members will permanently dedicate their attention and zeal to the eradication of such a terrible disease for the good of the

people. This is also a good time, it was added, to exhort the community in general to continue cooperating as up to now, hoping that there will be only success to be reaped at the end of the struggle.

8414
CSO: 5400

URUGUAY

NATION GETS NEW, REMODELED HEALTH CLINICS, HOSPITALS

Medical Services Opened

Montevideo LA MANANA in Spanish 5 Aug 78 p 7

[Text] Next Wednesday, 9 August, the Social Security Bank will inaugurate a modern medical service for the employees of its three branches: industry and commerce, civil and rural. This will mean expanded service as well as incorporation of other possibilities.

The remodeled medical service will operate in the bank building at 1716 Tristan Narvaja which has been remodeled by the Architecture Department and completely equipped.

General Features of Renovation

First the three medical services that served the industry and commerce, civil and rural branches were consolidated into a single medical service for the entire bank.

This insures uniform care of the employees regardless of the branch for which they work although the differences in application of the laws for each branch will remain in effect.

This inauguration also means administrative consolidation under a single section--Administrative Management--which will be in charge of the care and paperwork for the transactions under its jurisdiction for all users.

Along with the new administration the Registration and Records Office will be inaugurated. It will consolidate, distribute and record all administrative and technical work of the Medical Department.

Division for Examinations in the Interior Created

One of the important innovations is the creation of the Examinations Division in the interior of the republic.

A single system was created with doctors who reside in the interior and specially appointed traveling doctors who will be in charge of inspections, medical examinations and border cases.

Labor Medicine Section Created

The relationship between the sick employee and the doctor from the Social Security Bank was limited to temporary studies to determine whether the illness incapacitated him for his job and whether to grant him a pension.

With this Labor Medicine Section three tasks considered vital within the specialty--work physiology, functional rehabilitation and professional reeducation--will be undertaken.

Work physiology will cover those aspects that achieve better results with less effort and risk. It will be a combination of strictly medical work and job efficiency, safety and distribution.

Functional rehabilitation will seek the recovery of abilities lost through accident or illness. It will strive for rehabilitation and reincorporation of disabled employees.

This last area will be closely related to professional reeducation.

Finally the creation of other services such as the Archives and Statistics Division, Odontological Service, First Aid, library and auditorium was announced.

Durazno Center Authorized

Montevideo EL PAIS in Spanish 9 Aug 78 p 6

[Text] In agreement with the ministers of transportation and public health, President Mendez dictated a resolution to increase expenses authorized by previous resolutions for the execution of the project "Construction of Headquarters of the Departmental Public Health Center in Durazno" for a total of 10,401 new pesos. They will be used, through expansion of the contract, for extra projects.

New Blanquillo Polyclinic

Montevideo LA MANANA in Spanish 5 Aug 78 p 9

[Excerpt] Blanquillo--This afternoon the polyclinic in this town will be inaugurated as the result of the joint effort of the Ministry of Public Health, the Municipal Intendancy of Durazno, the Police Headquarters, civic leaders and rural inhabitants.

This polyclinic which fulfills local aspirations after almost a decade of work will surely be named after Dr Alejandro Sarachaga by popular request to give homage to the person who has been the leading proponent of this project.

Intensive Care Center

Montevideo EL PAIS in Spanish 13 Aug 78 p 15

[Text] About 15 years ago intensive care units were established in U.S. hospitals. This was in response to a theory to give more practical aid by stratifying levels of care. This means that patients are not grouped or divided into rooms according to their illness but according to the degree of care that they need. Normally on one hospital floor there are seriously ill patients who demand constant attention, others who are not so ill and others who walk around while waiting to be discharged.

This prevents concentration of resources and efforts of the staff, disperses their efforts and negatively affects the care that the patients receive. In Montevideo now many hospital centers have established intensive care units including IMPASA [expansion unknown], Hospital of Clinics, Italian Hospital, British Hospital, Spanish Association, House of Galicia, Larghero Sanatorium, American Sanatorium and CASMU [Assistance Center of the Medical Union of Uruguay].

Which patients are admitted to an intensive care unit?

Those patients who have a real or potential disruption of one or more of their major physiological systems (respiratory, circulatory and renal) and who are curable.

A dying or incurable patient is not admitted to an intensive care unit. It is not a center for seriously ill patients but a service with constant and specialized care that keeps the major systems stable for sufficient time so that the basic illness can regress and the patient can be saved. There is an infinite number of diseases but few causes of death. Accident, poison or cardiac victims can die from the same cause. This might be a disorder, a serious

imbalance, in the respiratory, circulatory or renal system. Many times when the disease is curable, the patient dies from physiological failure before the illness has had time to regress. This is the case, for example, in renal insufficiency. Generally it takes 15, 20 or 30 days to be cured but the person dies before that. By using a kidney machine, these patients are given the time needed so that they can survive until the disease in their own kidneys clears up.

Also patients who are well but who can have serious failure at any moment and must be watched until the danger period is over are admitted to an intensive care unit. The typical case is a patient who has a heart attack. They are all admitted there not because they are in serious condition but because statistically the more serious complications occur in the first 4 days. Even if they do not occur, they are hospitalized in a coronary unit for special observation during those 4 critical days in which they have the greatest possibility of becoming worse. It has been estimated that between 80 and 90 percent of the patients who are admitted to intensive care units are saved. The average length of hospitalization is 3 or 4 days; the real time varies from a few hours to months. Patients in these units are checked every half hour and every hour so that a patient could never be admitted for less time since if he does not need this observation, he does not need intensive care.

What is an intensive care center like?

In general, it has a small capacity. There are never more than 10 or 11 beds and when more are needed, it is better to establish a new center. This is due to the fact that the ideal number of nurses is one per patient. The maximum acceptable ratio is one nurse for two patients. This "staff-patient" ratio also has special characteristics. The work of the nurses is not limited to the strict observation in an intensive care center. They must also be people of proven calmness with knowledge of the potential problems the patients might have. It is a job with great responsibility in which teamwork is fundamental. It cannot be done without a special apprenticeship at the Hospital of Clinics which had the first intensive care center in our country. The first nurses were trained there and continue to be trained there. Also the doctors who are permanently assigned to this unit must learn appropriate techniques and have special training. The intensive care units also have technical control equipment that supports the clinical control of the nurses. This equipment includes monitors to measure the pulse, blood pressure and respiration and electrocardiographs.

Treatment equipment includes kidney machines, artificial respirators and defibrillators to treat the patient with electric shock.

Within this concept of medicine that stratifies patients according to the care that they need, the other levels of care should be pointed out also: intermediate, those who leave intensive care; low risk; and ambulatory, those who need less observation and care.

All the above serves to give confidence in the care offered in the hospitals, emphasizing the fact that the great majority of the seriously ill patients who are admitted to an intensive care unit are saved because of the competent attention that they receive. The reason they are admitted is not simply their serious condition but the special attention that they need to be able to conquer the original disease that caused the serious functional disorders that merit this type of treatment.

Remodeled Hospital Gets Director

Montevideo LA MANANA in Spanish 15 Aug 78 p 16

[Text] Colonia--Dr Antonio Canellas, minister of public health, installed the new director of the departmental center, Dr Eduardo Rossell.

The appointment responds to the decree by the Executive Branch to end the supervision ordered more than 2 years ago. The ministry received a valuable donation of the remodeling work done in the local center, its equipment and instruments through the work undertaken by the Colonia Hospital Development Commission.

The chairman of the Development Commission turned over the remodeling work as well as modern health equipment--valued at 30,000 new pesos--while the sum of 30,000 new pesos was made available for priorities determined by the center.

The Minister's Speech

Upon receiving that donation, the minister of public health stated: "Not only have I received information here and documents, physical equipment and technical parts that have been contributed to us but there is more to act as a stimulus for the job that the government has undertaken and is doing."

He continued: "I want to thank the people of Colonia for the confidence placed in us for the work done. The feeling, the support and the stimulus helped give us the desire to continue working; we feel encouraged in this difficult task."

Then the decree was read which terminates the supervision of the commission of Dr Eduardo Rossell, Dr Eugenio Visca and Dr Luis

Raimondi who had the duties of reorganizing departmental public health based on the new features decreed by the government.

Dr Canellas stated: "I want to go beyond the cold print of the decree to reveal the vibrant feelings of gratitude toward the three participants for the work done and to emphasize to the new director, Dr Rossell, that his initiatives for honest and efficient management will have the support of the government."

The director, Dr Eduardo Rossell, expressed his gratitude for the appointment promising his best efforts for the good progress of the institution.

Finally the official delegation toured the hospital installations. It included: Dr Walter Ravenna, minister of national defense; Dr Antonio Canellas, minister of public health; Gen Juan J. Mendez, commander of Army Division II and assistant secretary of public health; Retired Col Yamandu Viglietti, municipal intendant; Col Enso J. Curutchet, police chief; Col Daniel Garcia, director of Military School No. 5; Col Rafael Fajardo, head of Infantry Battalion No. 4; Capt Emeterio Lessa, prefect of ports; members of the development commission; and officials.

7717
CSO: 5400

YUGOSLAVIA

RISING RABIES CASES NECESSITATE NEW, STRICTER MEASURES

Belgrade VETERINARSKI GLASNIK in Serbo-Croatian No 6, 1978 pp 503-511

[Article by R. Pavlovic, scientific consultant, Veterinary Medicine Institute, Novi Sad: "Rabies Is Still With Us; A Retrospective Survey of the Implementation of Prophylactic Measures, the Conquest of the Disease, and Associated Difficulties" (article submitted to VETERINARSKI GLASNIK on 15 March 1978)]

[Text] In recent years there have been a number of cases which prove that rabies is still a very current problem in our country.

Between 1964 and 1970 there was not a single recorded case of rabies in humans, and only sporadic cases were noted in animals. During this period it was believed that rabies had finally been conquered. Veterinarians, who had borne the brunt of the fight against this disease, "took it easy" for a while, and so there was a slackening of vigilance and dedication in the implementation of basic prophylactic measures. And there was a lessening of vigilance and dedication among other people as well. Many people asked: "Why are these measures still being applied when there is no more rabies?" Similar statements and the uncooperativeness of dog owners led to a laxness among veterinarians in the performance of their duties.

According to data compiled by the Pasteur Institute in Novi Sad, during the period 1970-1976, 41 people died of rabies in Yugoslavia, and rabies was also responsible for the death or destruction of 704 animals.

M. Petrovic has described the annual incidence of rabies in humans and animals during the period 1946-1973. He showed that the occurrence of rabies cases in humans is a function of the incidence of rabies in animals, and he also proposed prophylactic measures.

The rise in the incident of rabies, starting in 1971, is of greater concern to professional veterinarians than it is to physicians and sociopolitical factors. Unfortunately, the full severity of rabies is felt only by those who are directly threatened. Even now people who have been bitten by rabid animals must look forward to each new day with trepidation, and for the

victims of this disease death is the only release from their terrible suffering. Those who have lost loved ones who died of rabies in the most terrible pain are consoled in their grief by some remaining photograph and by grave-stones. For other people rabies is a remote, theoretical danger, and they neither share the grief of the bereaved or the suffering and anxiety of those who have been bitten, nor do they take part in actions designed to prevent and conquer this disease.

Every citizen is entitled to ask questions and to demand answers as to why proven efficacious measures for the prevention and conquest of rabies are not being put into practice in our country when the law states that these measures are mandatory.

Standing measures aimed at the preventing and conquest of rabies include the following:

1. strict regulations governing the keeping of dogs and cats;
2. mandatory annual rabies vaccinations for dogs;
3. the regular destruction of stray dogs and cats;
4. the organized thinning of wild animal populations (wolves, foxes, wild-cats, badgers, and so on);
5. the reporting of suspected rabid animals;
6. the mandatory and rapid collection of biopsy material from suspected rabid animals and its prompt diagnosis;
7. personal prophylaxis and emergency medical aid;
8. the closest possible cooperation between veterinary and health services, hunting organizations, and other social organizations; and
9. the education of the public about the danger of rabies by physicians and veterinarians.

Who is supposed to carry out, coordinate, and control all of these measures?

As far back as 1933, in the preface of his popular pamphlet "Rabies," A. Vukovic wrote the following: "Even the best laws and the best ordinances are worthless if the people themselves are not aware of why they are necessary and do not understand their usefulness. In our country too there are some excellent ordinances and beneficial decrees which are nothing more than words written on pieces of paper, that is, they are not being carried out."

The problems and difficulties we are experiencing have to do with the practical implementation of operational and administrative-regulatory measures which are aimed at the prevention and eradication of rabies. By and large it is certainly true that there is resistance to the implementation of these measures. In the first place, discipline, and consistency, much less efficiency and personal accountability, are not always in evidence when it comes to the practical implementation of these measures.

It is hard to believe that we will soon be rid of rabies, not because we are lacking laws which would control this phenomenon or because effective prophylactic measures are unknown, but rather because it is difficult to carry out these same laws and measures. Simply stated, "dog owners have gotten out of control," and hardly anyone is willing to run the risk of arousing the ire of dog owners. It would seem that in most places where rabies is rampant it has been left up to the veterinarian or veterinary inspector alone to fight for and carry out the law or, in other words, to run the risk of offending dog owners.

What is at the root of all this, and what can be done?

All resistance to the implementation of these measures is basically attributable to the failure to fully recognize the danger of rabies and the failure to understand the complexity of the problems involved in providing for its prevention and elimination, the character and nature of the disease, and the interrelatedness of the methods and procedures that must be applied to prevent and conquer this disease. This applies above all to those who are directly exposed to the threat of rabies and to those who are involved in programs designed to control rabies. This in fact is in reference to the public at large, the general population, and, in particular, dog owners. As a rule, people's knowledge and awareness of the danger of rabies is poorest and their resistance to the implementation of preventive measures is most frequent and most extreme wherever the possibility is greater that they will come into contact with domestic and wild animals, including dogs primarily, and wherever the incidence of rabies is highest. In situations where this is the case people believe that a doctor can "save" (help) an injured person whenever that person decides to pay a visit to a medical center, even though, at least for the time being, this is a great misconception. People are not sufficiently convinced, especially in these kinds of situations, of the effectiveness of primary preventive measures. Further, people who are most directly affected by the implementation of basic measures designed to prevent and conquer rabies mistakenly believe that the protection of human health is not the primary reason why rabies should be eradicated. Consequently, it is believed that the anti-rabies vaccination of dogs is a "sham program" intended to enable veterinarians to "make money," and it is less widely believed that in our situation this kind of vaccination program is the most effective preventive measure as long as it is consistently carried out. Among the public at large it is felt, and I would say that this is the opinion of most people, that the conquest of rabies is exclusively a concern

of the veterinary profession. Thus, it is primarily the veterinary profession that is fixed with the blame for the rise in the incidence of rabies and rabies-related human deaths. This is a fact which must be borne in mind.

These opinions and beliefs have a decisive impact in shaping attitudes toward rabies and toward measures designed to prevent and conquer this disease. In my opinion the medical and veterinary professions share some of the blame for this state of affairs. How and why has this happened?

Data on the number of rabid animals and on the number of people who have been bitten by rabid animals and subsequently died are most often accessible only to a narrow circle of specialists. The general public is inadequately informed, since it is usually believed that it is in the general interest to keep the real truth from the public so as not to create a panic. Thus, even those programs which are undertaken by the veterinary profession in the interest of protecting the public health remain unpublicized, and the public is not adequately informed about or involved in these programs, with the result that it abstains from taking an active part in them. The truth is concealed from those who are directly exposed to the danger of rabies, those who ought to be actively participating in these programs. In this way the negligence and irresponsibility of those who are required to take these measures is also concealed from the public. The guilty parties go unpunished, even though their carelessness, lack of principles, irresponsibility, and negligence are paid for in human lives.

[The following "supplements" consist of excerpts quoted from the headlines and texts of news reports carried in the Belgrade daily tabloid VECERNJE NOVOSTI]

Supplement No 1.

"On the streets and in a hospital zone in Kosovska Mitrovica

"Dog Injures Five Schoolchildren

"A dog, which is suspected of being infected with rabies, also seriously injured Fetah Kastrati from Podujev...."

Supplement No 2.

"Finally, a full-fledged campaign to eliminate rabies in the Prizren area

"Gunfire Targeted Against the Epidemic!

"Gamehunters from Prizren have finally started to hunt down stray dogs that are carriers of dangerous diseases. A staff has been formed to lead the fight against wild dogs...."

No commentary is needed here. Why was there no reaction, if not at the very moment when the problem first arose, due to the unusual nature of the situation, then later? By failing to react promptly we helped to make existing misconceptions even more deeply rooted.

Since the public was not informed for "its own good" and since a climate was not created that would be conducive to the resolution of these problems, the problems remained unresolved. Instances in which a wolf attacked a group of schoolchildren and their teacher and a hunt was organized to track it down, in which a dog wandered around a corso and bit innocent pedestrians, or in which a veterinarian resigned from his position because he did not have the support of the SO [expansion unknown] were known only to a narrow circle of officials. The veterinarian's resignation did not solve any problems, since there were more problems after he left than while he was still on the job. And no one was concerned in the least about this, as if they believed that the problem of the eradication of rabies in the opstina in question was purely a "private, local affair" and that the problem would eventually solve itself in one way or another. I ask myself: are all of these real-life examples all that extreme (or sufficiently convincing) and should we keep quiet about them by not reacting in a prompt and appropriate manner. However, both the veterinary and medical professions should react to these kinds of cases, since, with a view to the protection of human health, it is general social interests that are at stake here.

Only in recent years has there been a significant increase in the degree to which residents of the Vojvodina have been kept informed about this problem, and this is owing to the efforts of specialists from the Pasteur Institute, the Veterinary Medicine Institute of Novi Sad, the Provincial Veterinary Inspectorate, and the opstina veterinary inspectorates in certain localities. The problem of public information deserves special consideration, and I will take up this at some other time.

It is also necessary to reach a general consensus and to mount organized campaigns when it comes to the resolution of problems associated with the strict regulation of dog ownership, reducing the canine overpopulation, and the regular vaccination of dogs. In our country, especially in certain regions, the dog problem is quite serious, even though rabies cases are not always reported. Dogs are a municipal health problem, and not a problem of the medical and veterinary professions.

The epizootiological and epidemiological terms the cat problem is rather neglected and out of control.

Both of these professions need to mount a joint effort to point out the constant urgency and seriousness of the rabies problem in order to come up with appropriate solutions. A joint commitment will also have to be made, at least in forums where decisions are made or where the decision-making process can be influenced, when it comes to addressing the importance of dog

vaccination programs and the problems that are associated with the implementation of these programs. This kind of commitment would appear to be unprecedented, even though it is indispensable if we are to succeed in making it possible for sociopolitical factors to become more fully informed about, to gain a real understanding of, and to give us a helping hand in the resolution of the abovementioned problems and also those problems which are arising in connection with the unresolved questions of dog and cat ownership (echinococcosis, dog and cat bites, and so on). Instances of negligence come to light only when these kinds of problems turn out to be acute and chronically insoluble, familiar, and ubiquitous. These problems are partially resolved when rabies cases are reported, but it often happens that this positive step is again followed by a neglectful attitude toward subsequent outbreaks of rabies or some other disease associated directly or indirectly with the dog and cat problem.

I, personally, am of the opinion that the rabies problem is insoluble:

- (1) as long as working veterinarians believe that they have fully discharged their responsibilities with regard to rabies control as soon as they complete the vaccination of dogs in accordance with the appropriate regulations,
- (2) as long as physicians believe that they have discharged their responsibilities by "being ready for" patients who have been bitten by rabid or suspected rabid animals, by treating their wounds, and by giving them anti-rabies treatment,
- (3) without effective punitive policies (administrative-regulatory procedures),
- (4) and without the full involvement of sociopolitical factors.

The current resistance to the implementation of these measures can only be overcome by means of a joint effort. The veterinary profession is in charge of the programs designed to deal with these problems. But veterinarians are not the only ones with duties to perform in this regard, nor are they capable by themselves, unaided by anyone else, of carrying out all of the necessary measures. This resistance must be overcome, since these programs are in the general public interest and dedicated to the protection of human health.

Rabies is a disease whose treatment falls within the category of so-called mandatory health protection. This means that the costs of patient care (primary and secondary treatment of wounds, anti-rabies treatment, and possible hospital stays) are paid for out of social health protection funds. This in effect means that regardless of how many patient-rabies victims may come along, the funds necessary for their care are always available. The doctor is in a literal sense "ready and waiting to receive patients." The doctor is in a position to actively abstain from the struggle to reduce the

influx of patients who have been bitten by rabid or suspected rabid animals (kudos to the exceptions to this rule!).

According to the data of the Pasteur Institute in Novi Sad, during the period between 1965 and 1976 in Yugoslavia anti-rabies treatment was provided for a total of 27,254 children and adults, of which 23,303 were given vaccine only and 3,951 persons were given both vaccine and serum.

The medical doctor is not involved in performing primary preventive functions. Basic prophylactic measures are being carried out by veterinarians, most often alone and without anyone's support. Unlike the medical doctor, the veterinarian is in a different, far more difficult and unenviable position, even if he does carry out primary prophylactic measures. The veterinarian has to become actively involved if he is to complete the registration of the dog population, if he is to convince dog owners and keepers of the need to get shots for their animals and if he is to be able to administer these inoculations. Since most dog owners believe that rabies vaccination shots are given for the protection of the dogs themselves, and not for the protection of people, complaints are heard almost continually, and the dog owners raise objections not only to the inoculations *per se*, but also to the cost of the service, instead of recognizing that this is an indispensable measure for the protection of human health. The attitude of dog owners toward rabies vaccination shots, even when these are administered in the owners' homes, is in large part responsible for the lax approach to this problem on the part of veterinarians. Practically speaking, the real focal point of the struggle for the implementation of basic preventive measures to combat rabies lies in convincing dog owners that they should keep only as many dogs as they really need and that they should get them vaccinated.

Some Examples of Negligence on the Part of Veterinarians

In some localities the attitude of veterinary specialists toward the rabies problem is inappropriate. Here are some of the most serious examples of this negligence.

1. There are very few veterinary stations that have cages for the quarantining of dogs and cats.

Observations are made superficially, hastily, and without showing due care and responsibility, and so clients get the impression and become convinced that this examination is not even all that important. Little in the way of anamnestic data is collected along with this superficial examination. And the dog owner's comment: "This is what I'm supposed to call an examination?"

Regardless of the professional skills of the person giving the examination, this has an undesirable psychological effect on the client. This attitude toward the observation and quarantining of dogs and cats carries over into the attitude which permits children to bring dogs and cats in for rabies examinations. It is not difficult to imagine how a veterinarian would feel if

a dog in the incubatory stages of the disease and undergoing an examination were to run off and bite people and other animals. For this reason, more conscientious veterinarians in certain localities in affected regions, given the lack of proper facilities for the quarantining of dogs in veterinary medical stations, conduct these examinations in the yards of the dog owners (after having previously notified the dog owners that their dogs must be constantly leashed). However, in spite of all these precautionary measures, these kinds of examinations necessarily involve a certain amount of risk. It is my opinion that in endemically stricken areas provisions ought to be made to build a single examining station equipped with cages for the quarantining of dogs and cats at public expense, and the costs of boarding the dogs and cats should be paid for by the owners (if they have not already had their animals vaccinated). It is most likely that this measure too would encourage people to take a more serious view of anti-rabies protective measures.

2. During interepizootic periods, and even during periods when rabies is rampant, in infected and threatened regions records are not kept of dogs, cats, and other animals which are brought in for examinations, and examination certificates are sometimes written out on ordinary pieces of paper or on a receipt slip and are given to the animal owner or person who was bitten, sometimes even without an official stamp, to be taken to the doctor.
3. Rabies vaccination shots for dogs are not given in all localities and regions at the appointed time. This happens even in places where rabies is rampant. Vaccination campaigns are postponed without reason. Devious dog owners sometimes take advantage of this, and when charges are finally brought against them for this misdemeanor they take their dogs off to another opstina, have them inoculated there, receive the vaccination certificate, and thus avoid the fine they deserve.
4. The dedication of veterinary inspectorates and working veterinarians and cooperation between them are often lacking or are inadequately demonstrated. After an outbreak of rabies has already occurred or when it is directly imminent it is found that everything that ought to be done will be done in a superficial manner.
5. Relations between some veterinary inspectorates and their cooperation on an opstina-to-opstina basis are not satisfactory when it comes to work co-ordination and public information tasks.
6. The vaccination of dogs against rabies is sometimes left entirely up to veterinary assistants, which testifies poorly to the seriousness of measures designed to help conquer rabies.
7. Dog owners are not given any papers for their dogs, and collars and license tags are often not put on at all "for technical reasons," or they are given to the owner to put on himself.

8. When an outbreak of rabies occurs some veterinary medical stations do not get involved to the extent that they should in efforts to combat this problem, since "they are not paid for this work out of public funds." Thus, it is left entirely up to the veterinary inspector and the district epizootiologist to worry about this.

9. There is very often a lack of commitment on the part of some members of the profession on behalf of coordinated and synchronized veterinary projects being carried out over a large area in order:

--to make the rabies problem familiar to those who have to support and make decisions related to the eradication of this disease,

--to see to it that minimal dog ownership requirements are adhered to and that a more thorough job is done of registering dogs,

--to consistently prevent the overbreeding of dogs and to make an organized effort to destroy stray dogs and cats.

We are unduly tolerant of the lack of expeditiousness in the handling of registration procedures and in the prosecution of those who do not abide by dog ownership regulations, and, as a result, it is becoming more and more difficult to vaccinate dogs against rabies with each passing year. In some localities the vaccination of dogs against rabies is even turning out to be a political problem, since there are many people who openly refuse to bring their dogs in for inoculation.

It is sometimes even suggested, and rightly so, that dogs should be vaccinated free of charge in residential areas where there is a very large surplus dog population (as in Rom [Gypsy] settlements).

10. As a professional group and as individuals we have not made a strong enough commitment to see to it that outbreaks of rabies in animals and humans are "exploited" to an appropriate degree in order to affirm the positive contribution of the veterinary profession to society and that its contribution to the preservation of human health is emphasized, thereby helping to overcome misconceptions concerning its role.

11. The regulation of the buying and selling of dogs is not as effective as it should be. There is the well-known and reported case of the transmission of rabies from Macedonia (Gostivar) to the Vojvodina (Odzaci).

The Assistance and Support of Sociopolitical Factors

The assistance of sociopolitical factors is most needed when it comes to keeping records on dogs that are supposed to be given shots and wherever there is resistance to the implementation of rabies inoculation programs. Registrars are compiling incomplete records, they do not list all dogs, since

they do not want to anger dog owners, and they are underpaid. Resistance is greatest wherever the dog population is largest, i.e., in Rom settlements, villages in underdeveloped regions, and in suburban neighborhoods.

Regulatory-administrative measures are most often poorly carried out, and so they do not achieve the desired results. Fines are light, and sometimes only symbolic, and fines are often meted out without ever seeing or hearing anything from the defendant. However, it is well-known that word after a fine spreads quickly if it is a heavy one and if it is imposed promptly. The law ought to stipulate a period of time within which a fine has to be imposed so that it will have an educational and instructive effect on the transgressor. How can it have such an effect if it is imposed a year after the fact!

11813
CSO: 2800

ZAIRE

CHOLERA EPIDEMIC REPORTED

Brussels LE SOIR in French 9 Sep 78 p 1

[Article by Jean-Claude Vantroyen: "Cholera in Zaire: 600 to 1,000 Deaths"]

[Text] Cholera is wreaking havoc in Zaire. Despite the relative silence of the Zairian authorities, the situation is indeed disturbing in eastern Zaire, and especially in Kivu.

In 10 days, from 26 to 30 August [as published], there were 1,000 cases of cholera and 84 deaths in Kirotshe, near Goma. During the same period, there were 20 deaths in Goma. These fragmentary figures give an idea of the catastrophe. And if one gathers all the figures available from different sources, and if one goes back to the beginning of the epidemic in Zaire, about the month of June, one must arrive at a death toll of between 600 and 1,000, or even more.

Thus there is no doubt about it: the situation is serious. And if there were still any doubt, it would be removed by a confidential report of a meeting, on Tuesday 29 August 1973, of the Joint Committee for Emergency Aid Management, Medical Subgroup, of the Republic of Zaire.

Dr Mandiangu points out first of all that the results of the measures recommended within the framework of the campaign and for prevention of cholera are poor. Specifically:

- the campaign against the danger from feces is doomed to failure by philosophical prohibitions of certain ethnic groups and tribes of Rwanda who may not relieve themselves in toilets;
- the boiling of drinking water is not accepted by the populace, who argue that this precaution takes the taste out of the water;
- the border police health measures (along the border with Rwanda) have proven ineffective because of the showing of false documents, the use of paths and secret passages, and the illicit sale of cholera vaccine by racketeers.

Dr Ruppol, who is chief of Belgian medical aid in Zaire and who follows the course of cholera across this country, adds that cholera, far from being a mere state of mind, constitutes a veritable menace, and that if severe eradication measures are not taken, the country runs the dangerous risk of its dramatic spread.

Dr Ruppol states that the results show a regression of cholera from the Bas Zaire area, whereas in the east (Kivu, for example), a disturbing rise in the number of cases is noted. It is therefore necessary, says Dr Ruppol, to recommend a special campaign, and for the Executive Council to launch an international appeal. This has not been done so far.

Since Kolwezi...

The cholera epidemic in Zaire began at the same time as the events of Kolwezi, last June. It started in Uvira. The General Administration for Development Cooperation sent the necessary equipment there. And they believed that the problem was solved.

But it sprang up again farther south, towards Bukavu and Burundi. An emergency fund was immediately requested of the Council of Ministers, for Zaire, Rwanda and Burundi. Doctors, equipment, medicines, and tens of thousands of doses of vaccine were sent.

Things calmed down, and then it started up again around Kirotshe and Goma. Rwanda is now stricken. Kigali is threatened. The peak of the epidemic has perhaps been reached. If it continues towards the interior of the country, the Belgians alone will no longer be capable of guaranteeing the health of the inhabitants. It would then be necessary for Zaire to request international aid.

Relative Silence

However, the Zairian authorities have been relatively silent. Silent, because no appeal for international aid has been launched yet. Relatively, because discussions have already taken place in Kinshasa between the National Bureau of Health and various embassies. Zaire is aware of the epidemic, but it is preparing, planning, forecasting, and even talking about a necessary budget of 70 million FB [Belgian francs]. But won't it be too late?

Why is Zaire delaying in calling for international aid? Undoubtedly because a country wants first of all to get out of a difficulty all by itself rather than with the help of several friendly countries. Perhaps also because Zaire fears that the World Health Organization might, if the situation were to be made official on the international level, impose a quarantine on the stricken regions or on the entire country.

However, it is false to say that no one is concerned about cholera in Zaire. The EEC has sent money to Burundi. The League of Red Cross Societies is

concerned with the whole of the cholera problem in Central Africa. While Rwanda and Burundi have officially requested aid from the Red Cross, the latter has not yet received an official request for aid from Zaire.

There is concern for medical aid also in the international relief service of Caritas Catholica. Rwanda and Burundi have in this way received subsidies for buying medicines. But for several weeks, the headquarters of Caritas in Brussels has been visited by missionaries who ask immediate aid from Caritas for Zaire. Caritas is presently examining these requests. The financial effort has to be very sizeable; it is for this reason that it is more difficult to grant it very quickly.

The General Administration for Development Cooperation is also actively involved with the countries affected by cholera in Central Africa--Burundi, Rwanda, but also Zaire: the presence of Dr Ruppel at the meeting of the Joint Committee for Emergency Aid Management is proof of this. Through the intermediary of FOMETRO [expansion unknown], an ASBL [expansion unknown] concerned with medical aid to Zaire, Rwanda and Burundi, the Belgian Government is likewise very active in the fight against cholera in Zaire.

We wanted to have the opinion of the embassy of Zaire on the cholera situation in that country. In the embassy, we were told that it was necessary to contact the embassy's medical service. And there, the doctor who runs it was absent. No one else could furnish an answer to our questions.

Furthermore, in the absence of new directives (this kind of instruction follows the official reports with a slight delay), the authorities of Sainport Bruxelles National are presently conducting the usual check of passengers coming from the affected regions. Special recommendations indicating the first symptoms of the disease and the urgency of contacting a physician in such a case are also being distributed to these passengers. It must be added, unfortunately, that most of the passengers do not read this tract, and throw it away even before leaving the airport....

11267
CSO: 5400

AUSTRALIA

APPEARANCE OF FISH PARASITE CAUSES CONCERN

Sydney THE SYDNEY MORNING HERALD in English 5 Sep 78 p 10

[Article by Colin Allison]

[Text]

Freshwater fish in the Hawkesbury and Nepean rivers are being attacked by a parasite called Lernaea, once confined to inland waterways of NSW.

The parasite, a member of the Copopod family, is recognised overseas as a major problem among wild and cultivated fresh-water fish.

So far no effective way has been found to control it.

The level of infestation was brought to the attention of Penrith Council recently by district fishermen concerned by thin, transparent growths on an increasing number of fish.

The council's health surveyor, Mr Don Hawkins, sent samples to the State Fisheries Department for examination.

Miss Elizabeth Auty, a technical research officer with the department, confirmed last night that Lernaea attack had reached epidemic proportions in the rivers.

She said the parasite was first reported in the Nepean-Upper Hawkesbury system about 18 months ago.

"We don't know how it got there but it's taking hold of our freshwater areas," she said.

Twenty years ago it was unknown in Australia, but in 1974 there was an epidemic in inland rivers of NSW.

While male and young Lernaea are free swimming, females attach themselves under fish scales and nurture their eggs with blood.

To anglers the parasites appear as worms about 1cm in length.

Miss Auty said infected fish were safe to eat, provided they were not ulcerated.

In several cases Lernaea weaken their hosts — catfish and mullet mainly — and secondary infection sets in. Many fish die when badly infected.

It is the second setback for fish in the river in the past 12 months. Last September the Health Commission warned people not to eat specimens effected with a mysterious ailment known as "Bundaberg disease."

CSO: 5400

BRAZIL

BRIEFS

AFRICAN SWINE FEVER--Porto Alegre--The president of the ad hoc committee in charge of eradicating swine fever has confirmed the existence of an outbreak of the disease in Gravatai, Rio Grande do Sul state. [Porto Alegre Radio Guaiba in Portuguese 0200 GMT 27 Sep 78 PY]

SWINE FEVER IN PORTO ALEGRE--Swine fever has arrived in Porto Alegre, it was confirmed this morning. The killing of over 1,000 hogs began this morning, and the operation will take at least 2 or 3 days. [Porto Alegre Radio Gaucha in Portuguese 1545 GMT 27 Sep 78 PY]

MOVEMENT OF HOGS--Florianopolis--Carlos Konder Reis, governor of Santa Catarina State, reported here today that movement of hogs across the border to Rio Grande do Sul State was again authorized, but noted that this movement will have to [be] made over the established routes. [Porto Alegre Radio Guaiba in Portuguese 2150 GMT 8 Sep 78 PY]

CSO: 5400

CAMEROON

BRIEFS

VACCINATIONS FOR ANTHRAX--The chief of the Zootechnical and Veterinary Center of Mbouda, Nde Ellie, has just finished his round of vaccinations, begun 16 June 1978, throughout his work sector. He made this long trip in, successively, the pastoral zones of Balatchi, Bamelo, Kombou and Bamesso. In the course of this round, the center's chief did 995 vaccinations for bovine pasteurellosis and 2,231 for symptomatic anthrax. Moreover, 2,030 cattle and 2,000 sheep and goats belonging to 68 herdsmen were counted. This journey also enabled the sector chief to note the destruction of certain grazing lands by farmers. He reminded the farmers of the content of the decree of 14 September 1976, regulating stock-raising. The conclusion of this campaign makes it possible to expect better yields on the qualitative and quantitative levels. [Text] [Yaounde CAMEROON TRIBUNE in French 25 Jul 78 p 7] 11267

CSO: 5400

EGYPT

BRIEFS

RIFT VALLEY FEVER--Discussions are now under way between Egypt and the United States on ways in which the latter can help in eliminating the sources of the fever-producing disease that afflicts animals and is transmitted from them to humans. It is called Rift Valley fever. The Animal Health Institute has been able to produce 20,000 doses to counteract the fever which is now being distributed to the regions where the fever is appearing. There was a high incidence of the fever last year, but this year it dropped by 90 percent. Dr Mahmud Da'ud, minister of agriculture, discussed with Dr 'Abd-al-Mun'im Muhammad 'Ali, the technical advisor to the Ministry of Animal Health, and Dr 'Izz-al-Din 'Ali ('Assat), director of the Department of Veterinary Medicine, the steps now being taken to eliminate the pockets where the fever has appeared in some of the governorates. The latest appearance was in a stockyard of the Meat and Milk Company in al-Salihiyyah. The Department of Veterinary Medicine has sprayed the live-stock compounds and garbage dumps with insecticide against the mosquito that carries the disease. The Ministry of Health has been asked to spray the stagnant water surfaces in ponds and marshes to exterminate the mosquitoes that breed there. The minister is studying a project for the establishment of an institute specializing in combatting this fever, and many nations have expressed their readiness to share in the cost of setting it up. [Text] [Cairo AL-AHRAM in Arabic 28 Aug 78 p 8] 5346

CSO: 8400

LAOS

BRIEFS

FOOT-AND-MOUTH DISEASE--Since 21 August foot-and-mouth disease has spread in Bo-o, Ban Hom, Phosi, Salakham and Sithantai cantons in Maung Hatsaifong, Vientiane Province. Regarding this, the veterinary section of Vientiane Province is cooperating with Soviet and UN specialists and central and local veterinarians to eradicate the disease. The people in Muang Hatsaifong have been advised not to move animals in or out of the areas affected by the disease. [Vientiane Domestic Service in Lao 0000 GMT 27 Aug 78 BK]

VIENTIANE VETERINARY WORK--During the first 6 months of 1978 cadre and workers in the Vientiane Animal Husbandry and Veterinary Office determinedly and attentively treated and innoculated domestic animals belonging to the people. They have completed their work in 12 districts. They innoculated 14,715 buffalo, 8,925 head of cattle, 5,748 pigs, and 5,929 chickens and ducks and treated and restored to normal health 357 buffalo, 197 head of cattle, 774 pigs, and over 500 chickens and ducks. [Vientiane VIENTIANE MAI in Lao 17 Jul 78 p 1]

PAKSAN VETERINARY WORK--In order to insure the health of domestic animals belonging to the people and get them ready for plowing, which is basic to the annual rice growing season, the veterinary units in Meuang [district] Paksan, Vientiane sent a number of specialized cadre out between January and the present to innoculate domestic animals in the 14 cantons in the district. They innoculated 456 buffalo and cattle and 209 pigs and examined 727 animals. They also examined 513 animals destined for market. [Vientiane VIENTIANE MAI in Lao 17 Jul 78 p 1]

HATSAIFONG VETERINARY WORK--During the first 6 months of 1978, veterinary cadre in Meuang [district] Hatsaifong, Vientiane continuously and actively examined domestic animals belonging to people in production and other areas in order to insure the health of draft animals, improve the food situation, and seize great victories in this year's production campaign. They innoculated 4,723 buffalo, 2,025 head of cattle, and 41 pigs against disease and treated and restored to health 289 buffalo, 61 head of cattle, and 266 pigs. [Vientiane VIENTIANE MAI in Lao 13 Jul 78 p 1]

SAITHANI VETERINARY WORK--During the first 6 months of 1978 the veterinary unit in Meuang [district] Saithani, Vientiane attentively carried out its particular task of treating and innoculating domestic animals belonging to people in the district. During these 6 months the unit treated 57 diseased animals, including 20 buffalo, 30 pigs, and 7 head of cattle, and restored them to health and innoculated a total of 4,367 animals, including 2,667 buffalo, 230 pigs, and 1,470 head of cattle. [Vientiane VIENTIANE MAI in Lao 1 Jul 78 p 1]

CSO: 5400

NEW ZEALAND

SCRAPIE PRONE SHEEP 'A RISK THAT FAILED'

Christchurch THE PRESS in English 19 Aug 78 p 3

[Text]

The imports of exotic sheep in 1972 were a "calculated risk that had not come off," said Dr J. T. Stamp, the authority on scrapie, yesterday, before he left Christchurch for Australia on his way back to Britain.

The sheep were imported from Britain in 1972, to improve New Zealand's sheep flocks.

But after the discovery of scrapie in these imported sheep on Mana Island in 1976, and again this year, the project has had to be abandoned.

Dr Stamp was asked to come to New Zealand to advise the Government about the fate of sheep on Crater block, near Rotorua, some of which originally were moved from Mana.

On Mana there had been two definite cases of scrapie and there might

have been several others, said Dr Stamp.

He told a big audience at a seminar at Lincoln College — attended by people from as far away as Southland — that since he had been in New Zealand he had seen lesions characteristic of scrapie in sheep brain material.

Had the animals on Crater block not also been destroyed, it was a safe assumption that the disease would have recurred there.

Advice to New Zealand authorities before 1972 had been that it would be better not to import sheep from Britain. However, if it were found necessary to do so for genetic reasons then safeguards should be taken such as the strict quarantine that had been attempted, he said.

Canada had been importing North County Cheviots from Britain,

under the same sort of conditions as New Zealand, without getting the disease. However, the New Zealand imports were a greater risk because they mainly were of sheep exotic to Britain, and came from properties through which there had been a considerable flow of stock.

Discussing research on scrapie, Dr Stamp said research on mice that were "resistant" to it had shown that they were not resistant or immune in the normal way. The agent that caused scrapie was present all the time but the mouse died of old age before clinical symptoms showed up. It was not known whether this applied in sheep, too, but it was a frightening thought. If it were the case, it was to be hoped that they were not excreting the disease spores all the time.

CSO: 5400

NEW ZEALAND

BRIEFS

CATTLE KILL CONTINUES--The killing of cattle afflicted with brucellosis will resume in Auckland. All bans on the killing of such cattle were lifted yesterday after lengthy discussions between the Auckland Freezing Workers' Union, the Department of Health and the Accident Compensation Commission over the brucellosis supplementary assistance scheme. The Minister of Labour, Mr Gordon, said last night that the negotiations had reached a satisfactory conclusion and all bans in the Auckland area were being lifted immediately. He was pleased that commonsense and good faith had prevailed in the negotiations. [Text] [Auckland THE NEW ZEALAND HERALD in English 23 Aug 78 p 3]

CSO: 5400

URUGUAY

BRIEFS

SWINE FEVER MEASURES--In the wake of the measures recommended by the nation's sanitary authorities to prevent that African swine fever--which has created serious problems in various South American countries--spread to the national territory, the hog raisers have been asking that a meatpacking plant and cold storage facilities be made available to them to stockpile hog carcasses. In response to the request, the Nacional and Melilla Meatpackers have been provided for the slaughtering and storage of "third party" hog production. Regarding the banning of the Prado hog exposition, it was viewed as another means of preventing the spread of the disease, a measure which was fully endorsed by the hog raisers of the country. In all this, it must be pointed out that there have been no cases of the African disease in swine in the national territory to date, therefore the whole series of measures being adopted are solely preventive in nature. On a different tack, we can report that the hog market remains sluggish, showing an offer which in some instances exceeds the demand. /Excerpt/ /Montevideo LA MANANA in Spanish 6 Aug 78
p 22/ 8414

CSO: 5400

ZAMBIA

BRIEFS

RABIES INFESTED AREAS--Choma and Senanga have been declared rabies infested areas according to the latest Government gazette, which says that the area lying within a 16-kilometre radius centred on Choma post office has been an infested area with effect from July 5. "The circular area lying within a ten-kilometre radius centred on Limoneno compound in Senanga in the Western Province has also been declared infested." [Text] [Lusaka TIMES OF ZAMBIA in English 9 Sep 78 p 2]

CSO: 5400

AUSTRALIA

BRIEFS

RARE WHEAT DISEASE--Rockhampton--Farmers in Central Queensland are watching the spread of a rare wheat disease which has devastated some crops. Reports have placed damage from "black chaff disorder" in some crops in the Callide Valley at 60 percent. On the Central Highlands, one report says that a crop has been completely affected. Primary Industries Department officer at Biloela (Mr Col Paull) said yesterday that the disease caused a dark purplish discolouration on blooms in the head and on the stalk of the wheat plant.
[Text] [Brisbane THE COURIER-MAIL in English 30 Aug 78 p 12]

CSO: 5400

LEAF BEETLES ATTACK YOUNG PADDY PLANTS

Rangoon THE WORKING PEOPLE'S DAILY in English 8 Sep 78 p 1

[Text]

MINHLA (Pegu Div), 4 Sep—Month old paddy plants at Myauksu, Anyardan, Waziya, Hnget-pyaw-daw and Oktwin villages in Sitkwin-Myoma village-tract, Minhla Township, are reportedly being attacked by leaf beetles (*hispa*), it is learnt.

Farmers at these villages were spraying the fields with insecticide to control the pests.

Some of the paddy fields being attacked by the beetles are as large as one acre but the attack is far from reaching epidemic proportions.

The farmers, beside combatting the pests with pesticides, are feeding urea fertiliser and manure to ensure growth of the paddy plants.

The local authorities have also been informed about the pest attacks.—(226)

Letpadan

LETPADAN, 3 Sep—Township Party and People's Council, Agriculture Corporation, Peasants Asiayone and High Yield Paddy Cultivation Supervision Committee have launched a pest control campaign to combat leaf beetles and tase worms which were reportedly attacking some paddy fields in the township.

The township authorities are visiting the fields attacked by pests and assisting the farmers in pest control work.

Measures were also being taken for rehabilitation of crops on flood hit fields.—(045)

Rehabilitation of crops

PYAPON, 31 Aug—Rehabilitation of crops destroyed by floods is being carried out under the supervision of Township Party and Council functionaries and Township Agriculture Corporation personnel.

A party comprising Township Party Unit Secretary U Tun Thein, Township People's Council Chairman Major Mya Than and Township Agriculture Corporation Manager U Soe Myint, are touring flood hit areas and supervising the work of rehabilitating crops affected by floods.

Stations to carry out rehabilitation of crops have been opened at Kyetpha-mwezaung and The-in-taman villages to supervise the work and to distribute seed paddy, fertilizers and insecticides.

The Kyetpha-mwezaung station is under the supervision of Township Party Unit Committee member U Kaung who is responsible for Kyetpha-mwezaung, Byaingkazi, Alanphalut, Gaygu, Thondat and Kadar villages.

The The-in-taman station is under the supervision of Township Party Unit Committee member U Hla Oo and is responsible for The-in-taman, Pale, Ka-zaung and Koe-eindan villages.

BURMA

BRIEFS

LOCUST THREAT--In June 1978, locusts were reported in Kachin State's Putao township and in Sagaing Division's Myinmu township; in July, in Arakan State's Rathedaung township; and in August, in Irrawaddy Division's Zalun township. The locusts are feeding on leaves of coconut, banana and mango trees, destroying the trees, while some corn, sesame and sugar plantations have also reported damage. Each swarm of locusts is reported to number from 5,000 to 10,000. As soon as the locust attacks are reported, samples of the insects are obtained by entomologists of the agriculture corporation for study. The entomologists also visit the invaded areas and have been able to get the situation under control in all the affected areas. [Rangoon Domestic Service in Burmese 1330 GMT 25 Aug 78 BK]

CSO: 5400

IRAN

LOCUST SWARMS PREDICTED IN OCTOBER

Tehran TEHRAN JOURNAL in English 10 Aug 78 p 3

[Text]

TEHRAN — Swarms of locusts will 'certainly' invade Iran sometime in October, the UN Food and Agriculture Organization (FAO) has warned.

The warning came during the current conference on methods of combating the desert locust, sponsored in Rome by the FAO.

Iran is among the 50 countries which is discussing the critical situation in the Horn of Africa, the Red Sea coast, India and Pakistan, the regions currently infested by the pest.

Last spotted in the Arabian deserts, the locusts are heading for the Persian Gulf and the southern parts of Iran, the FAO said.

Already busy with measures

to wipe out the plague in the infested areas, the organization has warned Iran and other Middle Eastern countries to stand by with all pest control methods, so that the region can be cleared before any damage is caused by the insects.

The Iranian Plant and Vegetation Preservation Organization has already taken precautionary measures in the Chah Bahar, Bushehr, Bandar-langeh and Iranshahr regions, while officials are investigating all the daily steps being taken by the FAO in the Arabian desert areas.

The last locust invasion hit Iran some 16 years ago, and the swarm covered an area 90 by 20 kilometers in Fars province.

Every square kilometer of land affected by the plague contained 80 to 100 million locusts, that attacked all the green crops, and having completely exhausted the fields, went for anything in their path, especially the wood on lamp and telegraph posts.

This year's constant rainfall in Africa, and in particular in the Horn of Africa, has created ideal conditions for the return of the locust, which had been under control in recent years.

However, much damage has already been caused to the crops of the African regions. The locust is capable of non-stop migration of up to 2,000 kilometers at a time, at a speed of 10 to 15 kilometers an hour.

CSO: 5400

KENYA

EXPLOSIVES USED TO DESTROY WHEAT EATING BIRDS

Nairobi DAILY NATION in English 11 Sep 78 p 3

Text / **EXPLOSIVES** and highly-inflammable fuel are the latest weapons in the war against millions of wheat-gobbling quelea birds which are destroying thousands of acres of crops in Laikipia District.

The head of the Quelea Control Unit of the Crop Production Division in the Ministry of Agriculture, Mr. Francis Kitonyo, who is in charge of "find-and-destroy mission", said the explosives and fuel were the most effective methods of destroying the birds' roosts.

In an operation at Timau near Nanyuki over the weekend, hundreds of thousands of birds were killed by explosives and fuel, he said.

The blast sent flames shooting 300 ft. into the area and shook the neighbourhood.

The blast was heard over a nine-mile radius.

When the billowing smoke died hundreds of thousands of roasted birds lay on the ground.

Mr. Kitonyo, who was accompanied on the mission by district agricultural officer Mr. C. B. Wangondu and other officers, said the devastation caused by the birds this year had surpassed any period in the history of wheat production in the country.

He dismissed reports that the birds eat twice their weight in a day, and appealed to farmers not to heed such "irresponsible" statements.

He assured the farmers the Government was aware of their plight and would do all it could to stop the birds.

Mr. Wangondu said officials would look for more roosts and the same blasting methods would be used to kill the birds.

The next exercise would be carried out in Ngarua in Laikipia West.

CSO: 5400

MOZAMBIQUE

PRODENIA PEST ENDANGERING COTTON PRODUCTION IN NAMPULA

Maputo NOTICIAS in Portuguese 20 Sep 78 p 2

[Interview with Faria Lobo, official of the technical department of the Provincial Directorate of Agriculture]

[Excerpts] Some aspects of the Nampula agricultural production were discussed at a round-table meeting in this province with officials of the Provincial Directorate for Agriculture.

Our questions regarding the state cotton sector were answered by Faria Lobo, an official of the technical department of that provincial directorate.

[Question] We have learned that the "Prodenia," a caterpillar which attacks cotton, is quite common in this province. Have you had any difficulties?

[Answer] The "Prodenia" invaded the Nampula province 3 or 4 years ago, coming from Cabo Delgado, and it is found in localized foci. This pest is not easily controlled because it eats practically anything and attacks cotton plants in sudden and unpredictable fashion. I know of only one product which can fully control it and we have taken timely steps to receive it so that we can use it at the right time. I hope that this problem will be dealt with adequately because personally, I believe that this caterpillar constitutes the major threat against cotton production the province of Nampula.

CSO: 5400

NEW ZEALAND

BRIEFS

TOMATO WILT--Vegetable and produce growers want a property in Whangarei put in total quarantine until a tomato disease discovered there has been eradicated. In a letter to the Minister of Agriculture (Mr MacIntyre) the Vegetable and Produce Growers' Federation asked for the quarantine, and for a prohibition on tomatoes from the property of Mr M. J. Wordsworth. The federation also wants the Government to cover the costs of about \$100,000 that the affected grower has incurred. "All authorities have acknowledged there is a risk of this particular strain of bacterial wilt spreading," it said. The disease was discovered on Mr Wordsworth's property in late July, and since then the federation has said that measures being taken by the Ministry of Agriculture are inadequate. If the disease spread throughout the glasshouse industry in New Zealand, it would mean the end of more than \$60M of equipment. [Text] [Christchurch THE PRESS in English 21 Aug 78 p 7]

CSO: 5400

EXPERIMENT TO STERILIZE TSETSE FLIES REPORTED

Salisbury THE RHODESIAN FINANCIAL GAZETTE in English 8 Sep 78 p 8

Text A fascinating scientific detective story is unfolding at the Tsetse and Trypanosomiasis Control ranch of the Department of Veterinary Services.

Professor I. Bursell and Dr Glyn Vale are searching for the "ingredient X" that will enable them to synthesise an attractant that will lure tsetse flies into traps where they will be treated with a chemosterilant and then released in order to mate and produce an increasingly sterile tsetse population.

The team is trying to synthesise the attractants that exist in the breath of cattle and which enable tsetse flies to "home in" on their living targets.

Early this year the team succeeded in producing condensed specimens of "pure cow smell" and embarked on a research programme to identify the particular chemical constituents that attract the fly. There were thought to be thousands of different chemical compounds involved, of which an unknown number and combination form the attractant stimulus.

A number of important clues have so far emerged. It seems that the carbon dioxide in the animal's breath provides about 25 per cent of the attraction.

Another component is a material that works only in the presence of carbon dioxide; while clues to the presence of a third material, probably acidic in nature, have been discovered by chemical analysis.

Other pointers have also come to light. For example, the percentage of attractant in an animal's breath goes down if it is injected with a certain sedative. And the percentage varies from day to day, possibly because of dietary factors. It goes up as an animal is fattened; down if it is kept short of food.

Acetone may prove to be the material that works in the presence of carbon dioxide; even minute amounts of acetone, in conjunction with carbon diox-

ide, act as a powerful tsetse attractant.

However, the effort to identify the attractants is continuing with the assessment of as many "ketones" as the research team is able to acquire. So far the results have been encouraging; it has been found that a number of ketones act as attractants, while others are repellants. Methyl-iso-propyl, for example, is an attractant; while acetophenone is a repellent. The team is trying to determine the molecular structure that decides whether a particular compound attracts or repels tsetse flies.

One problem, says Dr Vale, is that all the materials so far assessed require the presence of carbon

dioxide to be effective — which would mean incorporating bulky gas cylinders into the tsetse "baits."

A visual "target" — a model ox — has also been found useful — acetone in conjunction with the models will attract three times as many flies as acetone alone. The team believes that the flies may use the smell from long range, and then use their eyesight once the model is in view.

But, says Dr Vale, the problem is not capable of a simple solution, and there are still many unknowns to be assessed.

"If we can isolate the ingredients that provide the attraction" says Dr Vale, "we will be able to have them analysed by gas chromatography."

CSO: 4420

VIETNAM

BRIEFS

INSECTS, DISEASE AFFECT CROPS--Over the past 10 days, yellow rice borers have appeared in large numbers in the northern provinces. Brown bugs have sharply decreased in the southern provinces but have begun to appear in the north. Rice army worms have appeared in some northern provinces. Rice blast has appeared in some northern provinces and is harming the ripening rice crop. There are symptoms of chlorosis in many provinces. Silver-leaf disease and small leaf rollers are causing damage to the rice crop in some places. In the next 10 days, yellow rice borers will continue to appear in large numbers and rice army worms will cause damage to the early ripening rice crop in the northern provinces in mid-September. Brown bugs will cause damage to blooming rice plants in some localities from late September onward. In the Nam Bo provinces, brown bugs will likely create disease pockets and damage the early 10th-month rice crop. In the provinces of the 5th region, stem borers will cause much harm to the late 10th month rice. Rice blast and chlorosis will continue to develop in many provinces. [Hanoi Domestic Service in Vietnamese 1100 GMT 10 Sep 78 BK]

CSO: 5400

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